REMARKS

Status of Claims

Claims 15-18 are pending in the instant application. Claims 15-18 stand rejected. Favorable reconsideration is respectfully requested in light of the following remarks.

Objection of Claim 16

Claim 16 stand objected to since the word "be" should be "the". Applicants thank the Examiner for pointing out this typographical error. Applicants have amended claim 16 to replace the word "be" with the word - - the - -. Applicants respectfully request that the objection to claim 16 be withdrawn.

Rejection of claims 15-17 under 35 USC 102(b)

Claims 15-17 stand rejected under 35 USC 102(b), as being anticipated by Ingemansson et al. (4,569,471).

Applicants have amended claim 15 to clarify that the glass strand "has a density of 5 to 10 lbs/ft^3". No new matter has been added and support for the amendment can be found in the specification on page 8, line 15.

Ingemasson et al. teach a method of filling a muffler with **fiberglass wool**. Fiberglass wool is a standard material used as a noise dampening filler in vehicle mufflers (col. 1, lines 13-16).

The "Handbook of Air Conditioning and Refrigeration" includes Table 3.3, 'Thermal Properties of Selected Materials' adapted from ASHRAE Handbook 1989, Fundamentals (copy attached). In Table 3.3, glass wool is indicated as having a density of 3.25 lb/ft^3. This density is significantly lower than that of Applicants' claimed glass strand which has a density of 5 to 10 lbs/ft^3 . As such, Ingemasson et al. fail to teach or suggest Applicants' claimed invention including a glass strand having a density of 5 to 10

lbs/ft^3. Ingemasson et al. teach filling a muffler with glass wool for use as a noise dampener.

Claims 16-17 ultimately depend from claim 15 and contain the newly added limitations thereof. Applicants respectfully submit that claims 15-17 are now in condition for allowance. Accordingly, Applicants respectfully request that the 102(b) rejection of claims 15-17 be withdrawn.

Rejection of claims 15-17 under 35 USC 103(a)

Claims 15-17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ingemansson (4,569,471) in view of Mattis (3,968,877). The Examiner states that it would have been obvious in view of Mattis to have produced the package of Ingemansson et al. with a closure in the form of closure flaps, making the package suitable for storage and transportation.

As stated above, Applicants have amended claim 15 to clarify that the glass strand "has a density of 5 to 10 lbs/ft^3". Claims 16-17 ultimately depend from newly amended claim 15 and contain the limitations thereof. For the reasons stated above, Ingemansson et al. do not teach or suggest Applicants' claimed invention.

Mattis teaches a package for the storage of "crimped" acrylic tow, specifically, a "herringbone crimp" (col. 6, line 28). Further, Mattis teaches that the acrylic tow has a density of at least about 22 lbs/ft^3 (col. 7, lines 30-31). Mattis does not teach a "texturized glass strand" as Applicants claim. There is no mention of glass fibers in Mattis and, further, Mattis teaches "crimped" fibers and not "texturized" strand as Applicants claim.

Neither Mattis nor Ingemansson et al. individually nor the combination of Mattis and Ingemansson et al. teach or suggest all of Applicants' claim limitations. As such, a case of *prima facie* obviousness cannot be established. Accordingly, it is respectfully submitted that the 103(a) rejection of claims 15-17 be withdrawn.

Rejection of Claim 18 under 35 U.S.C. 103(a)

Claim 18 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Ingemansson et al. in view of Mattis as applied to claim 15 above, and further in view of Galanes (3,670,949). The Examiner states that it would have been obvious in view of Galanes to have made the carton of Ingemansson et al., as modified above, of corrugated cardboard to give the carton strength.

As stated above, neither Mattis nor Ingemansson et al. individually nor the combination of Mattis and Ingemansson et al. teach or suggest all of Applicants' claim limitations (newly amended claim 15). Claim 18 depends from claim 15 and contains the limitations thereof. In view of the fact that neither Mattis nor Ingemansson et al. teach or suggest all of Applicants' claim limitations, one would not look to combine the reference with that of Galanes. Accordingly, it is respectfully submitted that the 103(a) rejection of claim 18 be withdrawn.

Conclusion

The Examiner is invited to telephone the Applicants' undersigned agent at (740) 321-7213 if any unresolved matters remain.

If any questions should arise with respect to the above Remarks, or if the Examiner has any comments or suggestions to place the claims in better condition for allowance, it is requested that the Examiner contact Applicants' agent at the number listed below.

Applicant authorizes any fees required pertaining to this response be charged to Deposit Account No. 50-0568.

Respectfully submitted,

By: Maria C. Gasaway

Maria C. Gasaway
Reg. No. 51,721

Date: January 21, 2004

Owens Corning
2790 Columbus Road, Bldg. 54
Granville, OH 43023
(740) 321-7213

TABLE 3.3 Thermal Properties of Selected Materials

	Density, lb/ft³	Thermal conductivity, (Btu/h·ft·°F)	Specific heat, (Btu/lb·°F)	Emissivity	
Aluminum (alloy 1100)	171	128	0.214	0.09	
Asbestos: insulation	120	0.092	0.20	0.93	
Asphalt	132	0.43	0.22		
Brick, building	123	0.4	0.2	0.93	
Brass (65% Cu, 35% Zn)	519	69	0.09	0.033	Highly polished
Concrete (stone)	144	0.54	0.156		
Copper (electrolytic)	556	227	0.092	0.072	Shiny
Glass: crown (soda-lime)	154	0.59	0.18	0.94	Smooth
Glass wool	3.25	0.022	0.157		
Gypsum	78	0.25	0.259	0.903	Smooth plate
Ice (32°F)	57.5	1.3	0.487	0.95	
Iron: cast	450	27.6	0.12	0.435	Freshly turned
Mineral fiberboard:					
acoustic tile, wet-molded	23	0.035	0.14		
wet-felted	21	0.031	0.19		
Paper	58	0.075	0.32	0.92	
Polystyrene, expanded, molded beads	1.25	0.021	0.29		
Polyurethane, cellular	1.5	0.013	0.38		
Plaster, cement and sand	132	0.43		0.91	Rough
Platinum	1340	39.9	0.032	0.054	Polished
Rubber: vulcanized, soft	68.6	0.08	0.48	0.86	Rough
hard	74.3	0.092		0.95	Glossy
Sand	94.6	0.19	0.191		
Steel (mild)	489	26.2	0.12		
Tin	455	37.5	0.056	0.06	Bright
Wood: fir, white	27	0.068	0.33		
oak, white	47	0.102	0.57	0.90	Planed
plywood, Douglas fir	34	0.07	0.29		
Wool: fabric	20.6	0.037			

Source: Adapted with permission from *ASHRAE Handbook 1989, Fundamentals*.

The equilibrium moisture content of most commomly used insulation material at 90 percent relative humidity ambient air, as well as the moisture content of insulation material at 80 percent TRR by weight (percent of dry weight) and by volume (percent of volume of insulating material) are listed below:

Insulation material	Density, lb/ft³	φ = 90%	Moisture content, %	
			80% TRR, by weight	80% TRR, by volume
Cellular glass	8.4	0.2	23	3.1
Expanded polystyrene	1.0	2.0	383	6.1
Glass fiber	9.2	1.1	42	6.2
Urethane	2.1	6.0	262	8.8
Phenolic foam	2.6	23.4	25	1.0

For instance, for cellular glass when in contact with an ambient air of 90 percent relative humidity at normal room temperaure that reaches an equilibrium state during moisture absorption, it has

HANDBOOK OF AIR CONDITIONING AND REFRIGERATION

Shan K. Wang

Second Edition

McGraw-Hill

New York San Francisco Washington, D.C. Auckland Bogotá
Caracas Lisbon London Madrid Mexico City Milan
Montreal New Delhi San Juan Singapore
Sydney Tokyo Toronto

Library of Congress Cataloging-in-Publication Data

Wang, Shan K. (Shan Kuo)
Handbook of air conditioning and refrigeration / Shan K. Wang — 2nd ed.
p. cm.
Includes index.
ISBN 0-07-068167-8
1. Air conditioning. 2. Refrigeration and refrigerating machinery. I. Title.

TH7687.W27 2000
697.9'3—dc21 00-060576

McGraw-Hill

A Division of The McGraw-Hill Companies

1 2 3 4 5 6 7 8 9 0 DOC/DOC 0 6 5 4 3 2 1 0

ISBN 0-07-068167-8

The sponsoring editor for this book was Linda Ludewig, the editing supervisor was David E. Fogarty, and the production supervisor was Pamela A. Pelton. It was set in Times Roman by Progressive Information Technologies, Inc.

Printed and bound by R. R. Donnelley & Sons Company.

This book was printed on acid-free paper.